

Short notes of collecting in Spain in 1924.

By O. QUERCI and Dr. E. ROMEI.

During 1924 we made several trips to collect Lepidoptera. In March Dr. Romei and our pupil Sig. Ederli went to Tripoli, in Northern Africa, a country where no entomologist had collected until now. Dr. Romei returned to Italy in May and he then went to get a few *Parnassius apollo* and *P. muemosyne* on the Aspromonte, in Calabria. Sig. Ederli remained to collect in Tripoli till September. The African captures were numerous and good: more than 5000 Rhopalocera, Heterocera and Micros, about 260 species, have been caught, and it seems that several new species have been discovered.

The study of the Lepidoptera from Tripoli will take a long time to work out. Dr. Romei will publish later on the result of his collecting.

In the month of May Orazio Querci and his wife Clorinda went to Albarracin, in Aragon. The spot seemed so favourable that Dr. Romei, with his wife and baby came there one month after.

Clorinda Querci with her daughter remained to collect at Albarracin; Dr. Romei and O. Querci went on to the highest top of the "sierra." The collecting in the plateau and on the high mass of Aragon has been successful, but as rains were quite missing in that district the Lepidoptera began to be scarce as time went on so that Dr. Romei went to Asturias. On the first days of September the weather was so cold in Aragon and Asturias that we all were obliged to go to Catalonia, where we remained to collect till October, after which we returned in Italy.

About 18,000 Rhopalocera and Heterocera were caught by us in Spain; it is impossible in such a short time to give news about all the species we have found. But we will summarise the most interesting things we have observed on the field.

Coenonympha pamphilus of Aragon is different from all the specimens from Peninsular Italy. A yellow line occurs between the brown suffusion and the margin. This form, which we have collected also in Sicily, is the one named *lyllus* by Esper, but in Aragon it not only occurs in summer, but also the vernal and autumnal specimens are *lyllus*; not even one *C. pamphilus* has been seen by us at Albarracin, Tramacastilla and Noguera. In Asturias, about 400 miles away from Albarracin, we found the common *C. pamphilus* mixed with *lyllus*. In Catalonia we collected *C. pamphilus* only. I conclude that *C. pamphilus* and *lyllus* are two different species, as in Aragon one can see *C. lyllus* in May and September and in Asturias one can identify the two species, living together, at first glance.*

Powellia sao emerges in a variable, but quite definite, form in Asturias and Catalonia, while in Aragon we found three forms so different,

[* The bulk of experience and observation so far seems to indicate that *C. pamphilus* and the form *lyllus* are but one species, *lyllus* being the hot dry season form. Where no *C. pamphilus* were found but only *lyllus*, it was in the abnormally dry and hot area of Aragon, where probably *C. pamphilus* was over and gone before Signor Querci arrived. The season also was an abnormally early and hot one. It is not unusual to find both spring or summer forms intermixed in ever varying proportions from spring predominance to summer predominance. The whole question can only be settled by some one in the respective areas breeding from the egg. Mr. Bethune-Baker says that from his morphological examination he is influenced to suggest two distinct species.—Hy. J. T.]

that we suppose they are three different species. The most common form of Aragon is *P. sao*, the scarcest form, with tawny underside and different pattern is perhaps *P. orbifer*. We do not dare to give our opinion on the third large form but it much strikes us.

At Orihuela, 5000ft., we found the usual *Hyponephele lycaon*. All specimens from Catalonia we have seen in the the Museum of Barcelona belong to the above named species, but at Albarracin, 3000ft., *H. lycaon* lives together with *H. lupinus*, Costa. It is very easy to separate the two species looking at the androconia, and this confirms Count Turati's opinion that *H. lupinus* is not a form of *H. lycaon*, but a quite different species. It seems that till now these two species have never been found living at the same spot.(†)

On the high mass of Aragon we found a few individuals of *Strymon ilicis* with a very large fulvous spot on the forewings. This beautiful insect is quite similar to those from Valais, which Dr. Verity named "*inalpina*."

At Albarracin our wives took a few specimens of the form *aesculi* also with a large fulvous spot, which are perhaps "*maculatus*, Gerh." *Strymon ilicis* is quite wanting at Albarracin, but in the Museum of Barcelona we have seen large series of *S. ilicis* and of the form *aesculi* which one can identify at first glance; no doubt *Strymon ilicis* and *S. aesculi* are two different species according to Mr. Oberthür's views.(‡)

Plebeius (Aricia) medon emerges at Orihuela in a form like that which Oberthür named *neradensis*. The shape of the wing is elongated, the fulvous spots of the upperside are reduced in extent and often missing on the forewings of the male, while they are small but always forming a complete crescent in the female. By that character the males of *P. medon* of Orihuela can very easily be separated from the females. The underside is grey in the males and pale fulvous in the females. The form which we caught at Tramacastilla, 10 miles away from Orihuela, is quite different: smaller, with a rounded contour of wings and with a complete marginal crescent of fulvous spots reaching to the upper margin of the forewings in both sexes; not only in the female, but also in the males. The underside is much darker than in the Orihuela form. It is very difficult to differentiate sexes in the Tramacastilla form.

Looking at the series of *P. medon* from Puerto de Orihuela and Tramacastilla one might believe that the high mountain form, 5000ft., is different from the one lower down, 4000ft., but while we collected those two different forms on the mountain mass, our wives were getting both forms which were flying together in the Aragon plateau. At Albarracin, 3000ft., Clorinda Querci and her daughter Érilda Romei

[† *Hyponephele lycaon* frequents more elevated regions, while *H. lupinus*, although occurring towards the west, is a more southern and eastern species. The separation of the two was suggested by Count Turati on the morphological difference of the genitalia. (Count Turati called *lupinus* by the name *rhamnusia*.) Dr. Chapman, at my request, went over the ground with specimens sent to me from Cyprus, where only *H. lupinus* occurs, and the mounts are still in my possession. The androconia, the shape of the androconial patch, the contour of the wings, the area of the distribution, etc., all combine with the genitalia to show the complete differentiation of the two species.—Hy. J. T.]

[‡ This is another case where to prove the assertion, breeding from the egg is needed. The Rev. G. Wheeler thinks this has already been done.—Hy. J. T.]

collected a fine series both of the form like that of Orihuela and the other from Tramacastilla. This on the same days and at the same spot. I conclude that in Aragon, and perhaps in most of Europe, two different species have always been considered as to be simple geographical forms of *P. medon*. I agree that such an opinion is very bold, because save the shape of wings, the extent of fulvous spots of the upperside and the ground colour of the underside, the two forms are very alike, having a quite identical disposition of black spots on the underside. The study of genitalia is necessary but we are not able to do it. (†)

[† This is another case where to prove the assertion, breeding from the egg is needed.—Hy. J. T.]

NOTES ON COLLECTING, etc.

UNUSUAL FOOD-PLANT OF *DICRANURA VINULA*.—In a sheltered corner of a garden near the sea at Bridlington, E. Yorkshire, in August-September, 1917 and 1918, but near which there were no trees of any description, there grew a mass of '*Convolvulus major*' on a rockery. This was mostly eaten by the larvae of the "Buff Ermine," but I observed a good many larvae of the "*Puss Moth*" (*vinula*), feeding on this same plant, and on which I bred several. When the time of pupation arrived, they found their way up the side of a brick wall and made their cocoons in the depth of the ivy that grew there, so that the only way to discover their whereabouts was to pull back the ivy, which exposed the shining undersides of the cocoons. Surely this is a very unusual foodplant?—H. B. P. KETTLEWELL, Pageites, Godalming.

SIREX GIGAS IN PERTHSHIRE.—I have received a fine specimen of *S. gigas* taken on September 1st, at Aberfeldy by Mrs. James Haggart.—W. BOWATER (F.E.S.), 23, Highfield Road, Edgbaston, Birmingham.

LATE EMERGENCE OF *PLUSIA GAMMA*.—On December 12th, 1924, I took a freshly emerged male of *P. gamma* on the wooden railing of the station here.—HERBERT MASSEY (F.E.S.), "Ivy Lea," Burnage, Didsbury, *January 8th, 1925*.

DEATH'S-HEAD MOTH, *ACHERONTIA (MANDUCA) ATROPOS*.—I am desirous of obtaining, for statistical purposes, as complete a series of records of the capture of this species as possible. If any readers of this Journal who possess examples or records of the larva, pupa, or imago from any part of the British Isles would favour me with the exact date and precise locality of their specimens, stating whether in larval, pupal, or adult stage, I should be greatly indebted.—PERCY H. GRIMSHAW, Royal Scottish Museum, Edinburgh, *January 16th*.

EARLY APPEARANCE OF *H. LEUCOPHÆARIA*.—I saw a specimen of *H. leucophaearia* on January 23rd, at Crohamhurst near Croydon.—H. J. T.

SCIENTIFIC NOTES AND OBSERVATIONS.

In his "Myrmecological Notes for 1924" Mr. Donisthorpe, speaking of finding dealated ♀♀ of *Lasius* (otherwise known as *Acanthomyops*) *umbratus*, after a marriage flight, carrying dead ♂♂ of *L. niger* the